

REMARKS

Claims 1, 3-35, 37-43, 45, 47-60, 62, 64-80, 82-116, 118, and 120-145 are pending. By this amendment, claims 1, 23, 37, 45, 62, 80, 104, and 118 are amended. No new matter is introduced. Support for the claim amendments can be found at least in the original claims and at page 50, line 22 – page 51, line 21 of the specification. The amendments are made to clarify the relationship between the hardware upgrade and the set top terminal, as claimed, and no range of equivalents is surrendered thereby. Reconsideration and allowance of the claims in view of the above-amendments and the remarks that follow are respectfully requested.

REJECTIONS UNDER 35 U.S.C. § 103

On page 5 the Office Action rejects claims 1-4, 8-11, 13-14, 16-19, 22-24, 27-28, 31-33, 37-39, 41-43, 45-47, 51-56, 60, 62-64, 68-71, 73-74, 78, 80-82, 86-89, 91-92, 96, 98-108, 110-114, 116, 118-120, 124-127, 129-130, 134, 137-138, and 141-142 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 5,192,999 to Graczyk et al. (hereafter Graczyk) in view of U.S. Patent 4,513,315 to Dekker et al. (hereafter Dekker). This rejection is respectfully traversed.

Claims 2, 46, 63, 81, and 119 have been cancelled in the previous amendment. Therefore, the rejection of these claims is rendered moot.

Graczyk is directed to a computer system for generating video images in association with a personal computer. The system comprises a personal computer 24 that includes a chassis and a monitor 26. A television circuit 46 and an AM/FM tuner circuit 48 are associated with the personal computer and located within the chassis (col. 2, lines 10-16 and col. 5, line 54; Figure 1). Dekker is directed to a community antenna television arrangement for the reception and distribution of TV signals and digital audio signals (abstract). Dekker focuses on techniques for optimizing the transmission capacity of the television arrangement (col. 1, lines 63-68). However, Graczyk and Dekker, individually and in combination, do not disclose or suggest “[a] hardware upgrade operably connected to a set top terminal, the hardware upgrade comprising: an interface to the set top terminal through which a subscriber selection and digital audio signals that represent audio programs are received from the set top terminal ... the audio processing circuitry comprises a tuner that tunes to a selected audio program in the received digital audio signals based on the received subscriber selection” as recited in amended claim 1 (emphasis added).

The Examiner asserts on pages 2 and 6 of the Office Action that the combination of references teaches an upgrade for the set top terminal as a whole in that it can replace (upgrade) a set top terminal. Applicants respectfully disagree. Amended claim 1 now recites “[a] hardware upgrade operably connected to a set top terminal.” Therefore, the hardware upgrade is an addition to the set top terminal and not a replacement. In addition, the hardware upgrade includes an interface through which subscriber selections and digital audio signals are received from the set top terminal. Since information is transmitted from the set top terminal to the hardware upgrade, the hardware upgrade and the set top terminal are two separate systems. Neither Graczyk nor Dekker disclose or suggest a hardware upgrade in addition to a set top terminal.

Furthermore, the hardware upgrade includes a tuner that tunes to a selected audio program in the received digital audio signals. Since Dekker’s system does not have a hardware upgrade, the tuning unit 15 of Dekker cannot be located on a hardware upgrade. Moreover, the Examiner concedes that neither Graczyk nor Dekker explicitly describe an interface for selecting audio programs. However, the Examiner asserts on page 5 of the Office Action that the system of Dekker must select audio channel in order to permit the subscriber to listen to one of the plurality of audio channels and to enable a tuner to select the appropriate channel. Applicants respectfully disagree. Even if Dekker’s system suggests an interface, the suggested interface would necessarily be an interface for both video and audio signals located on a television set, which is different from the interface for digital audio signals located on the hardware upgrade.

Since none of the cited references disclose or suggest each and every element of amended claim 1, a combination of the cited references also does not teach or suggest each and every element of the claim. To establish a *prima facie* case of obviousness ... the prior art reference (or references when combined) must teach or suggest all of the claim limitations. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) and MPEP § 2142. If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and MPEP § 2143.03. Therefore, claim 1 is allowable. For this reason and the additional features they recite, dependent claims 3-4, 8-11, 13-14, 16-19, and 22 are also allowable. Applicants therefore respectfully request withdrawal of the rejection of claims 1, 3-4, 8-11, 13-14, 16-19, and 22 under 35 U.S.C. §103 (a).

With respect to claim 23, for the same reason as noted above with respect to claim 1, Graczyk and Dekker, individually and in combination, do not disclose or suggest “a first hardware upgrade operably connected to the set top terminal, comprising: an interface to the set top terminal through which the digital audio signals and the subscriber audio program selection are received from the set top terminal ... the audio processing circuitry comprises a tuner that tunes to a selected audio program in the received digital audio signals based on the received subscriber audio program selection” as recited in amended claim 23 (emphasis added). Therefore, amended claim 23 is allowable.

Claims 24, 27-28, 31-33, and 98-103 are allowable because they depend from allowable claim 23, and for the additional features they recite. Applicants therefore respectfully request withdrawal of the rejection of claims 23-24, 27-28, 31-33, and 98-103 under 35 U.S.C. §103 (a).

With respect to claim 37, for the same reason as noted above with respect to claim 1, Graczyk and Dekker, individually and in combination, do not disclose or suggest “a hardware upgrade operably connected to the set top terminal, comprising: an interface to the set top terminal through which the digital audio signals and the subscriber audio program selection are received from the set top terminal ... the audio processing circuitry comprises a tuner that tunes to a selected audio program in the received digital audio signals based on the received subscriber audio program selection” as recited in amended claim 37 (emphasis added). Therefore, amended claim 37 is allowable.

Claims 38-39 and 41-43 are allowable because they depend from allowable claim 37, and for the additional features they recite. Applicants therefore respectfully request withdrawal of the rejection of claims 37-39 and 41-43 under 35 U.S.C. §103 (a).

With respect to claim 45, for the same reason as noted above with respect to claim 1, Graczyk and Dekker, individually and in combination, do not disclose or suggest “receiving subscriber selections from the set top terminal; tuning to one of the digital audio signals representing the audio programs using a tuner based on one or more of the received subscriber selections, wherein the tuner resides on a hardware upgrade operably connected to the set top terminal” as recited in amended claim 45 (emphasis added). Therefore, amended claim 45 is allowable.

Claims 47, 51-56, and 60 are allowable because they depend from allowable claim 45, and for the additional features they recite. Applicants therefore respectfully request withdrawal of the rejection of claims 45, 47, 51-56, and 60 under 35 U.S.C. §103 (a).

With respect to claim 62, for the same reason as noted above with respect to claim 1, Graczyk and Dekker, individually and in combination, do not disclose or suggest “a hardware upgrade operably connected to a set top terminal, comprising: an interface to the set top terminal through which the digital audio signals and the subscriber audio program selection are received from the set top terminal ... the audio processing circuitry comprises a tuner that tunes to a selected audio program based on the received subscriber audio program selection” as recited in amended claim 62 (emphasis added). Therefore, amended claim 62 is allowable.

Claims 64, 68-71, 73-74, 78, and 137-138 are allowable because they depend from allowable claim 62, and for the additional features they recite. Applicants therefore respectfully request withdrawal of the rejection of claims 62, 64, 68-71, 73-74, 78, and 137-138 under 35 U.S.C. §103 (a).

With respect to claim 80, for the same reason as noted above with respect to claim 1, Graczyk and Dekker, individually and in combination, do not disclose or suggest “means for receiving subscriber inputs including a subscriber audio program selection from a set top terminal ... the means for processing comprises means for tuning to a selected audio program using a tuner based on the received subscriber audio program selection, wherein the tuner resides on a hardware upgrade operably connected to the set top terminal” as recited in amended claim 80 (emphasis added). Therefore, amended claim 80 is allowable.

Claims 82, 86-89, 91-92, 96, and 141-142 are allowable because they depend from allowable claim 80, and for the additional features they recite. Applicants therefore respectfully request withdrawal of the rejection of claims 80, 82, 86-89, 91-92, 96, and 141-142 under 35 U.S.C. §103 (a).

With respect to claim 104, for the same reason as noted above with respect to claim 1, Graczyk and Dekker, individually and in combination, do not disclose or suggest “a first hardware upgrade connected to the set top terminal, wherein the first hardware upgrade is capable of receiving the digital audio signals and subscriber audio program selections from the set top terminal ... wherein the audio processing circuitry comprises a tuner that tunes to a

selected digital audio signal” as recited in amended claim 104 (emphasis added). Therefore, amended claim 104 is allowable.

Claims 105-108 are allowable because they depend from allowable claim 104, and for the additional features they recite. Applicants therefore respectfully request withdrawal of the rejection of claims 104-108 under 35 U.S.C. §103 (a).

With respect to claim 110, for the same reason as noted above with respect to claim 1, Graczyk and Dekker, individually and in combination, do not disclose or suggest “a hardware upgrade operably connected to the set top terminal, comprising: an interface to the set top terminal through which the digital audio signals and the subscriber audio program selection are received from the set top terminal ... the audio processing circuitry comprises a tuner that tunes to a selected audio program in the received digital audio signals based on the received subscriber audio program selection” as recited in amended claim 110 (emphasis added). Therefore, amended claim 110 is allowable.

Claims 111-114 and 116 are allowable because they depend from allowable claim 110, and for the additional features they recite. Applicants therefore respectfully request withdrawal of the rejection of claims 110-114 and 116 under 35 U.S.C. §103 (a).

With respect to claim 118, for the same reason as noted above with respect to claim 1, Graczyk and Dekker, individually and in combination, do not disclose or suggest “a hardware upgrade operably connected to a set top terminal, comprising: an interface to the set top terminal through which the digital audio signals and the subscriber audio program selection are received from the set top terminal ... the audio processing circuitry comprises a tuner that tunes to a selected audio program based on the received subscriber audio program selection” as recited in amended claim 118 (emphasis added). Therefore, amended claim 118 is allowable.

Claims 119-120, 124-127, 129-130, and 134 are allowable because they depend from allowable claim 118, and for the additional features they recite. Applicants therefore respectfully request withdrawal of the rejection of claims 118-120, 124-127, 129-130, and 134 under 35 U.S.C. §103 (a).

On page 10 the Office Action rejects claims 5, 6, 48, 49, 65, 66, 83, 84, 121 and 122 under 35 U.S.C. § 103(a) as being unpatentable over Graczyk and Dekker in view of U.S. Patent 5,270,809 to Gammie et al. (hereafter Gammie). This rejection is respectfully traversed.

Claims 5-6 depend from claim 1. Claims 48-49 depend from claim 45. Claims 65-66 depend from claim 62. Claims 83-84 depend from claim 80. Claims 121-122 depend from claim 118. As discussed above, claims 1, 45, 62, 80 and 118 are allowable. Moreover, Gammie does not cure Graczyk and Dekker of the defect described above. For at least these reasons and the additional features they recite, claims 5, 6, 48, 49, 65, 66, 83, 84, 121 and 122 are allowable. Withdrawal of the rejection of claims 5, 6, 48, 49, 65, 66, 83, 84, 121 and 122 under 35 U.S.C. § 103(a) is respectfully requested.

On page 11 the Office Action rejects claims 7, 50, 67, 85 and 123 under 35 U.S.C. § 103(a) as being unpatentable over Graczyk and Dekker in view of U.S. Patent 5,550,863 to Yurt et al. (hereafter Yurt). This rejection is respectfully traversed.

Claim 7 depends from claim 1. Claim 50 depends from claim 45. Claim 67 depends from claim 62. Claim 85 depends from claim 80. Claim 123 depends from claim 118. As discussed above, claims 1, 45, 62, 80 and 118 are allowable. Moreover, Yurt does not cure Graczyk and Dekker of the defect described above. For at least these reasons and the additional features they recite, claims 7, 50, 67, 85 and 123 are allowable. Withdrawal of the rejection of claims 7, 50, 67, 85 and 123 under 35 U.S.C. § 103(a) is respectfully requested.

On page 11 the Office Action rejects claims 12, 15, 26, 27, 57, 72, 75, 90, 93, 128, 131, 136, 139, 140 and 143 under 35 U.S.C. § 103(a) as being unpatentable over Graczyk and Dekker in view of U.S. Patent 5,410,326 to Goldstein (hereafter Goldstein). This rejection is respectfully traversed.

Claims 12 and 15 depend from claim 1. Claims 26 and 27 depend from claim 23. Claim 57 depends from claim 45. Claims 72, 75, 90, 93, 140 and 143 depend from claim 80. Claims 128 and 131 depend from claim 118. Claims 136 and 139 depend from claim 62. As discussed above, claims 1, 23, 45, 62, 80 and 118 are allowable. Moreover, Goldstein does not cure Graczyk and Dekker of the defect described above. For at least these reasons and the additional features they recite, claims 12, 15, 26, 27, 57, 72, 75, 90, 93, 128, 131, 136, 139, 140 and 143 are allowable. Withdrawal of the rejection of claims 12, 15, 26, 27, 57, 72, 75, 90, 93, 128, 131, 136, 139, 140 and 143 under 35 U.S.C. § 103(a) is respectfully requested.

On page 12 the Office Action rejects claims 20, 21, 30, 34, 42, 58, 76, 94, 115 and 132 under 35 U.S.C. § 103(a) as being unpatentable over Graczyk and Dekker in view of U.S. Patent 5,253,066 to Vogel (hereafter Vogel). This rejection is respectfully traversed.

Claims 20 and 21 depend from claim 1. Claims 30 and 34 depend from claim 23. Claim 42 depends from claim 37. Claim 58 depends from claim 45. Claim 76 depends from claim 62. Claim 94 depends from claim 80. Claim 115 depends from claim 110. Claim 132 depends from claim 118. As discussed above, claims 1, 23, 37, 45, 62, 80, 110 and 118 are allowable. Moreover, Vogel does not cure Graczyk and Dekker of the defect described above. For at least these reasons and the additional features they recite, claims 20, 21, 30, 34, 42, 58, 76, 94, 115 and 132 are allowable. Withdrawal of the rejection of claims 20, 21, 30, 34, 42, 58, 76, 94, 115 and 132 under 35 U.S.C. § 103(a) is respectfully requested.

On page 12 the Office Action rejects claims 36, 44, 61, 79, 97, 102, 109, 117 and 135 under 35 U.S.C. § 103(a) as being unpatentable over Graczyk and Dekker in view of U.S. Patent 5,327,554 to Palazzi et al. (hereafter Palazzi). This rejection is respectfully traversed.

Claims 36, 44, 61, and 117 have been cancelled in the previous response, therefore, the rejection of these claims is rendered moot.

Claim 102 depends from claim 23. Claim 79 depends from claim 62. Claim 97 depends from claim 80. Claim 109 depends from claim 104. Claim 135 depends from claim 118. As discussed above, claims 23, 62, 80, 104, and 118 are allowable. Moreover, Palazzi does not cure Graczyk and Dekker of the defect described above. For at least these reasons and the additional features they recite, claims 79, 97, 102, 109, and 135 are allowable. Withdrawal of the rejection of claims 79, 97, 102, 109, and 135 under 35 U.S.C. § 103(a) is respectfully requested.

On page 13 the Office Action rejects claims 35, 59, 77, 95 and 133 under 35 U.S.C. § 103(a) as being unpatentable over Graczyk and Dekker in view of U.S. Patent 4,887,308 to Dutton (hereafter Dutton). This rejection is respectfully traversed.

Claim 35 depends from claim 23. Claim 59 depends from claim 45. Claim 77 depends from claim 62. Claim 95 depends from claim 80. Claim 133 depends from claim 118. As discussed above, claims 23, 45, 62, 80 and 118 are allowable. Moreover, Dutton does not cure Graczyk and Dekker of the defect described above. For at least these reasons and the additional features they recite, claims 35, 59, 77, 95 and 133 are allowable. Withdrawal of the rejection of claims 35, 59, 77, 95 and 133 under 35 U.S.C. § 103(a) is respectfully requested.

On page 13 the Office Action rejects claims 144-145 under 35 U.S.C. § 103(a) as being unpatentable over Graczyk and Dekker in view of U.S. Patent 5,479,268 to Young et al. (hereafter Young). This rejection is respectfully traversed.

Young is directed to a user interface for television schedule system. Young's system allows a television viewer to access on screen television program listing and use the program listings in an easy and convenient way to control operation of a video cassette recorder or other recording device. However, none of the cited references disclose or suggest "an interface to the set top terminal through which a subscriber selection and digital audio signals that represent audio programs are received from the set top terminal, wherein the digital audio signals are received from a television program delivery system, wherein the television program delivery system is capable of simultaneously transmitting video signals that are unrelated to the digital audio signals" as recited in claim 144 (emphasis added).

The Examiner asserts on page 15 of the Office Action that "Young teaches a schedule system/tape controller (fig.22A 22B) (claimed hardware upgrade), which is located remotely from the set top terminal (co.12, II. 38-52)." However, since the user interface of Young resides on the schedule system (see column 12, lines 38-52), subscriber selections are transmitted from the schedule system to the set top terminal. Conversely, the hardware upgrade recited in claim 144 receives subscriber selections from the set top terminal. Therefore, Young does not cure Graczyk and Dekker of the defect described above. Furthermore, none of the references disclose or suggest the feature of "simultaneously transmitting video signals that are unrelated to the digital audio signals." The Office Action fails to address this feature in rejecting claim 144. Since none of the references disclose or suggest all of the elements of claim 144, claim 144 is allowable.

Claim 145 is allowable because it depends from allowable claim 144, and for the additional features it recites. Applicants therefore respectfully request withdrawal of the rejection of claims 144-145 under 35 U.S.C. §103 (a).

In view of the above remarks, Applicants respectfully submit that the application is in condition for allowance. Prompt examination and allowance are respectfully requested.

Should the Examiner believe that anything further is desired in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,

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